

FIGURE 1

2/8

1 MSKEAVSLWALIVSOPVPLCVCREMTGSGRRKQOCVILPFIISRELCFYLLFPFPRLEYTEHOGGIKN MOP1  
 1 ..... NSRRPALRAAAGARPAGPSGSGOPPEOH MOP5  
 18 RKESRAAARSRSKESEYFELAHOLPLPHNVSSHLDKASVHRLTISYLRVKLLDA-- MOP1  
 15 RKESRAAARSRSKESEYFELAHOLPLPHNVSSHLDKASVHRLTISYLRVKLLDA-- MOP2  
 71 AREASDIEKRKRKNSFIDELASLPTCNASRLDKLIVLRVAVOHMTKLRGATNPY MOP3  
 9 KRARNKSEKKRRDOOFNVLIKELSSMLP---GNTRKHOKTIVLEEVIQFLOKMEVSAOT MOP4  
 29 ..... MOP5  
 basic region  
 helix-loop-helix  
 76 GOLQIEDD-----HKQMHCFYALKADGFMVHLTD-GDMHLYSDNMYKHGLTOFEL MOP1  
 75 SENESAE-----AODMHNLYLKALGFTAVTID-GDMHLYSENISKFHGLTOVEL MOP2  
 131 1-----EANYKPIFLSDDELKHLIRAADGFLFVVGDRGKILFVSSEVFKILNYSONDL MOP3  
 66 EICODDOWKPSFLSNEEFITOLHLEALDGTIAVITD-GSIIYVSOSIPLGLHLPDSVM MOP4  
 34 .....LGGHILQSLDGFVFALNCE-GKELYISELYSLVSLGLSVOVENI MOP5  
 A-repeat  
 129 GHSVDFTHPCDHEEHRHRLIHR-----NG-LYKKGKEONT MOP1  
 128 GHSJDFTHPCDHEEIRENLSLK-----NGSGFKKKSDHST MOP2  
 187 GOSLFDYLPKADIAKVKQELSSSDIAPRERLIDAKTICLPVKTDIPGSRILCSGARRSFF MOP3  
 125 DONLLNLFPEOEHESEVYKILUSS-----HMLVTD-----SPSEYIKSDGDLFY MOP4  
 70 GSSVFDYTHPCDHEEYELQGLRIP-----GPIPPSVSSSSSSSLADITPEIASL MOP5  
 164 .....ORSF-----FLRMKCIISRRITNINKSATW-KVLHCIGHYVDI-N MOP1  
 165 .....ERDF-----FMRMCIIVINRGRIIVNLKSATW-KVLHCIGOVYNNCP MOP2  
 247 CRHKNRPSVYEDOKPS-ICSKKADKRSFCIINST---GYLKSWP-PKMGLEDONE MOP3  
 169 CHLL-----RGLSNPKFPIYETIKFVGNFRSYNNVPSGNGFONILSRPCRVLGKE-- MOP4  
 125 IKV-----PPSSLVOERSF-----FVRMKSILIKRG--LHVKASGY-KYIHYIGRLRAHA--- MOP5  
 205 SNOPOGKYKPPHICLVIC-----EPIPHPSNIEIPLDS--KIFLSRHSLSNKFYCDER MOP1  
 207 PHNSLCGYKEPLLSCLITMC-----EPIPHPSNIEIPLDS--KIFLSRHSLSNKFYCDER MOP2  
 302 PONEGCN-----LSCLVAIGRLSHVVPVNGEIRVKS--EYVSRHAIIDCKFVFDOR MOP3  
 223 .....VCFIATVRLAT---POFLKEHCIVDEPLEEFISRHSLEWKFLLDHR MOP4  
 172 .....LG-LVALG-----HILPPAPLAEPLHG--HMIVFLRLSLGLILACESR MOP5  
 259 ITTELHGYEPEELLGRSIEYTHALDSOHLTKTHOHFI---KGQVITGOYRHLAKRGYVW MOP1  
 261 ITTELHGYEPEELLGRSIEYTHALDSOHLTKTHOHFI---KGQVITGOYRHLAKRGYVW MOP2  
 355 AIALAYLPDOLLGISCYVETHOODIHLAECHROVLPITREKTIINCYKFKIDGSF IIL MOP3  
 267 APPITIGYLPFLVGTIGYDYTHIDOLELLARCHOHLHOF--GKGKSCCYREFLTKGDOOWIWL MOP4  
 213 VSDHDLGPSELVGRSCVDFVHGQDAIRIBOSHVOLLB--KGQVHTGYRWLORAGGFVWL MOP5  
 B-repeat  
 318 ETOATVITYNKNOPACIVCNVYVSGIIOHDLIFSLQOIECVLKPVESSDHKHTOLF K MOP1  
 320 ETOGIVITYNKNOPACIVCNVYVSGIIOHDLIFSLQOIECVLKPVESSDHKHTOLF K MOP2  
 415 RSRWF SFRNPWIKVEYIYSINIVVLANVLEGGOPIFPOLIASPHNSDNLPSGEGGPKR MOP3  
 326 OIHYIITYHWNKSPFIVCHSVSVYADVVRERDELALEDPPSEALHSSALKKGGSSL MOP4  
 272 OSVATVAGSGKSPGCHHVLWVSHVLSAEGGOIPLDAFOLPASVACEEASSPGPEPTEPE MOP5

FIGURE 2

3/8

FIG. 3A

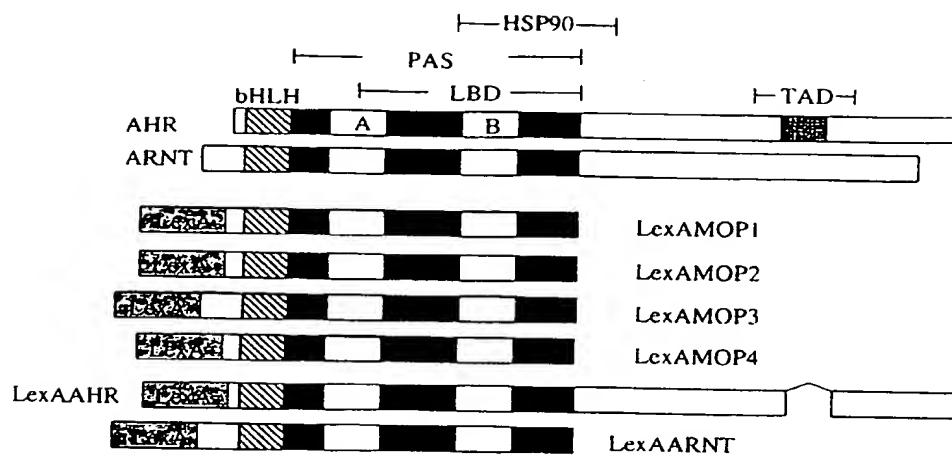


FIG. 3B

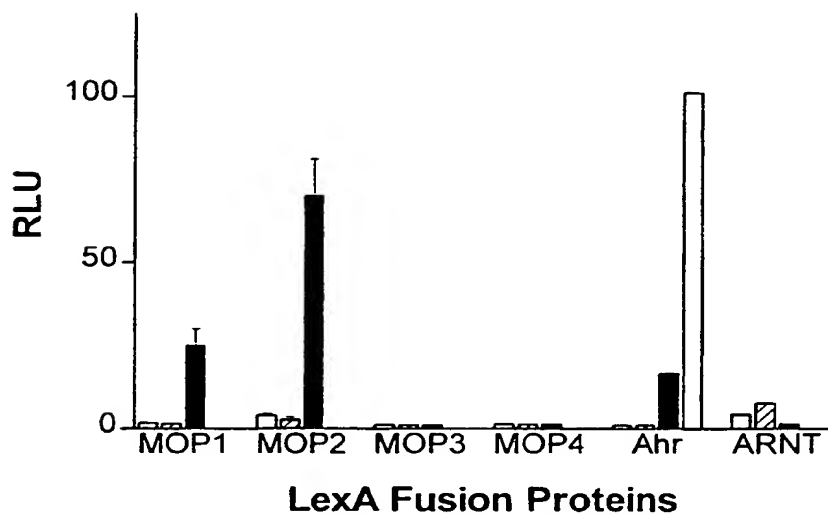


FIGURE 3

4/8

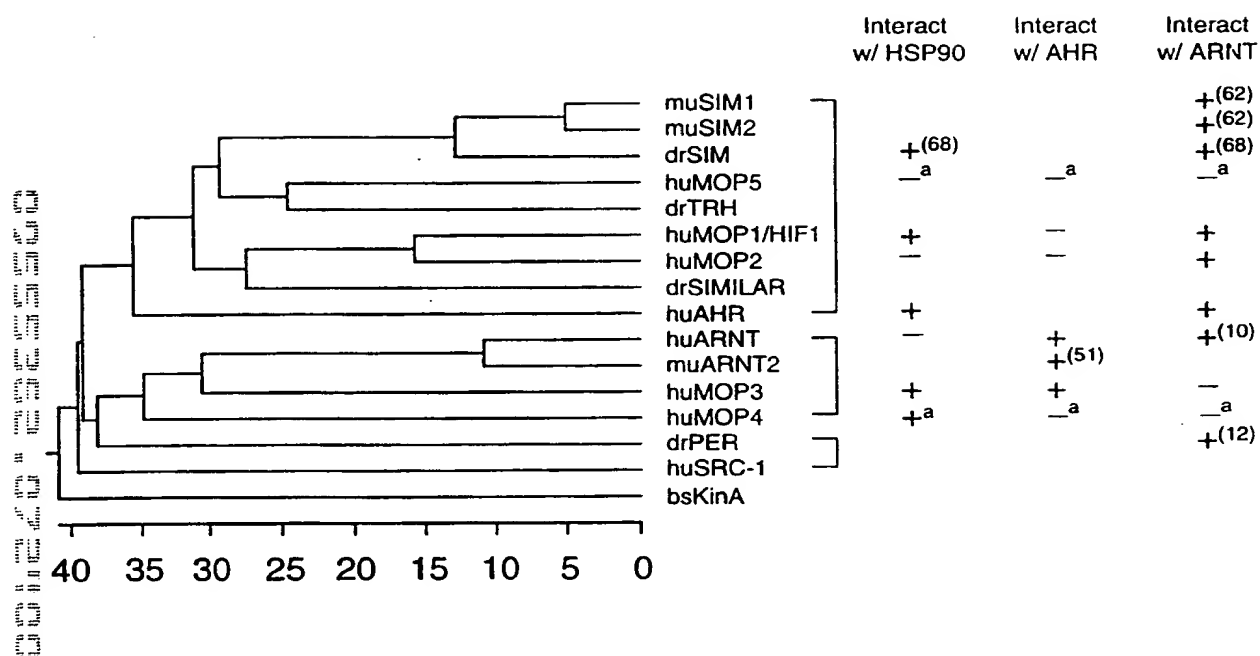
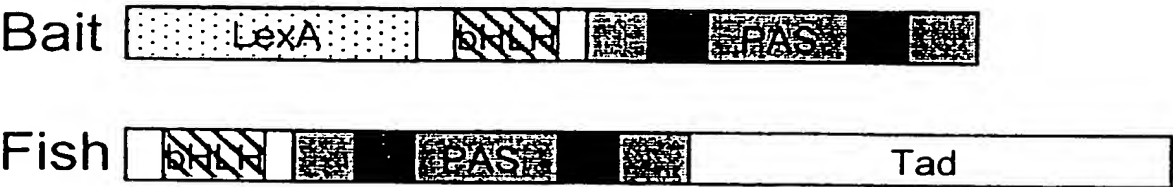


FIGURE 4

5/8

|     |    |     |    |    |    |    |    |    |    |    |    |    |    |
|-----|----|-----|----|----|----|----|----|----|----|----|----|----|----|
| g   | g  | G   | G  | C  | A  | C  | G  | T  | G  | A  | C  | A  | C  |
| G   | G  | T   | A  | C  | A  | C  | G  | T  | G  | A  | C  | C  | C  |
| t   | g  | a   | a  | C  | A  | C  | G  | T  | G  | A  | C  | C  | C  |
| t   | g  | a   | a  | C  | A  | C  | G  | T  | G  | A  | C  | T  | C  |
| g   | g  | G   | C  | C  | A  | C  | G  | T  | G  | A  | C  | C  | T  |
| G   | G  | G   | A  | C  | A  | C  | G  | T  | G  | A  | C  | C  | g  |
| c   | T  | A   | A  | C  | A  | C  | G  | T  | G  | A  | C  | C  | G  |
| g   | a  | a   | c  | C  | A  | C  | G  | T  | G  | A  | G  | C  | T  |
| t   | g  | a   | a  | C  | A  | C  | G  | T  | G  | A  | C  | A  | C  |
| g   | G  | G   | T  | C  | A  | C  | G  | T  | G  | A  | C  | T  | C  |
| G/T | G  | A/G | A  | C  | A  | C  | G  | T  | G  | A  | C  | C  | C  |
| -7  | -6 | -5  | -4 | -3 | -2 | -1 | +1 | +2 | +3 | +4 | +5 | +6 | +7 |

FIGURE 5



LexAbHLH-PAS "Bait"

| Full Length "Fish" | LexAbHLH-PAS "Bait" |       |      |      |     |      |       |      |
|--------------------|---------------------|-------|------|------|-----|------|-------|------|
|                    | HLF1α               | HLF2α | MOP3 | MOP4 | AHR | ARNT | CLOCK | LEXA |
| MOP3               | +                   | ++    | -    | ++   | -   | -    | ++    | -    |
| ARNT               | +                   | ++    | -    | -    | ++  | -    | -     | -    |

FIGURE 6

7/8

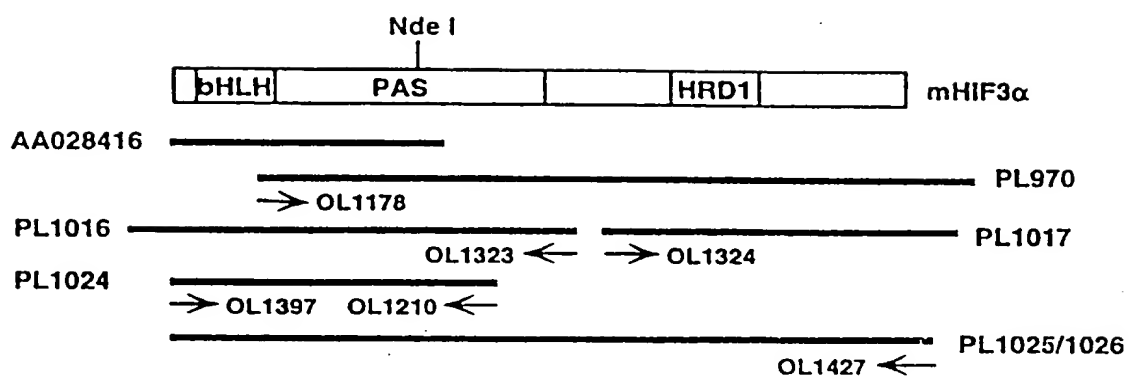


FIGURE 7

8/8

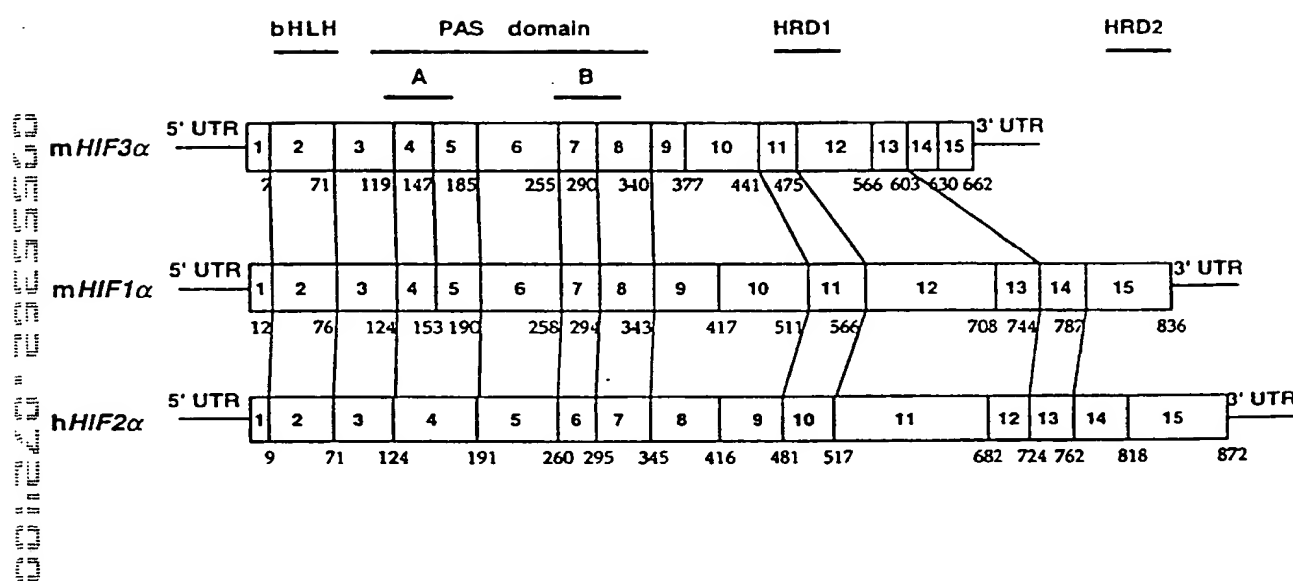


FIGURE 8